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EXAMINER	
LU, CHARLES EDWARD	
ART UNIT	**PAPER NUMBER**
2161	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/02/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/676,711	LAWRENCE, STEPHEN R.	
	Examiner	Art Unit	
	Charles E. Lu	2161	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-58* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-58* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 September 2003* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *12/29/5;7/8/5;3/3/5;2/24/4*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-58 are pending.

2. Claims 1-58 are rejected.

Drawings

3. The drawings are objected to because of the following informalities:

As to **fig. 4B**, elements **#342-1...342-n** should be shown in the specification.

As to **fig. 9A**, element **#945** should be shown in the specification.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Appropriate corrections are required.

Specification

4. The disclosure is objected to because of the following informalities:

In **para. 0047**, the element numbers do not appear to be shown in the drawings.

In the pseudo code of **para. 0061**, seventh line from bottom, the word "value" appears to be misspelled.

The title is not sufficiently descriptive of the claimed invention.

The following title is suggested:

PERSONALIZATION OF WEB SEARCH RESULTS USING TERM, CATEGORY, AND LINK-BASED USER PROFILES

Appropriate corrections are required.

Claim Objections

5. Claim 25 is objected to because of the following informalities:

As to claim 25, the occurrence of "scored" should be changed to scores.

Appropriate corrections are required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 1-58 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

As to claim 1, the claim contains an abstract idea (e.g., "accessing, receiving, identifying, assigning, ranking" etc.). Therefore, the claim must be drawn to a practical application of the abstract idea, which may be established through either a physical transformation or a useful, concrete, and tangible result. See MPEP 2106.

The claim does not cause a physical transformation. For example, the steps of "accessing, receiving, identifying, assigning, ranking" are reasonably understood to one of ordinary skill in the art as merely data manipulation without actually producing any physical transformation.

The claim does not produce a useful, concrete, and tangible result. Merely "accessing, receiving, identifying, assigning, ranking" is believed to be an abstract manipulation, failing to enable the "useful, concrete, and tangible" to be realized. The claimed invention as a whole must produce a "useful, concrete and tangible result." Emphasis added. *State Street, 149 F.3d at 1373-74, 47 USPQ2d at 1601-02*. See MPEP 2106.

This discussion also applies for all other pending claims.

As to claims 43-58, the claims are reasonably interpreted to be software per se, which is non-statutory. See MPEP 2106.

Art rejection of the above claims is applied in anticipation of Applicant amending the claims to overcome the rejection under 35 U.S.C. 101, discussed above.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 27, and 43 are rejected under 35 U.S.C. 102(b) as being anticipated by Breese et al (U.S. Patent 6,006,218).

As to claim 1, Breese teaches the following claimed subject matter:

A method of personalizing search results of a search engine, comprising: accessing a user profile for a user based on information about the user (fig. 2B, #224, fig. 5, col. 5, ll. 20-45),

The user information including information derived from a set of documents (col. 5, ll. 20-45),

The set of documents comprising a plurality of documents selected from the set consisting of documents identified by search results from the search engine, documents accessed by the user, documents linked to the documents identified by search results from the search engine, and documents linked to the documents accessed by the user (col. 5, ll. 20-45);

Receiving a search query from the user (col. 6, ll. 60-65);

Identifying a set of search result documents that match the search query (fig. 2C, #230-231);

Assigning a generic score to each of at least a plurality of the search result documents (col. 7, ll. 18-45);

Assigning a personalized score to each document of the plurality of search result documents in accordance with the generic score assigned to the document and the user profile (col. 7, ll. 18-45, details on col. 8-17); and

Ranking the set of search result documents according to their personalized scores (col. 7, ll. 18-45, details on col. 8-17).

Claims 27 and 43 are drawn to substantially the same subject matter as claim 1, discussed above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 2-3, 18, 22, 28-29 and 44-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Breese et al (U.S. Patent 6,006,218).

As to claims 2 and 3, Breese does not expressly teach wherein the set of documents include a plurality of documents that have been identified by search results from the search engine and that have/have not been viewed by the user.

However, Breese teaches that the user information includes previous search information (col. 5, ll. 30-33, col. 16, l. 40) and that the search information may include

information on the entries that were presented to the user as a result of the search (i.e. search results). Furthermore, Breese states, "it may be assumed that the user is aware of these entries, or at least the highest ranked entries (col. 16, ll. 34-50)." As discussed above, the user information includes information on previous Internet site access operations (col. 5, ll. 30-35).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Breese with the above, such that "wherein the set of documents include a plurality of documents that have been identified by search results from the search engine and that have/have not been viewed by the user" is implemented. The motivation would have been to enhance the effectiveness of the retrieval result adjustor, because data regarding actual document views would be used.

As to claim 18, Breese teaches the following claimed subject matter:

A method of personalizing search results of a search engine, comprising: creating a plurality of user profiles for a plurality of users, each user profile including at least a user's identification number and information derived from documents visited by the user (col. 5, ll. 20-45);

Receiving a search query from a user of the plurality of users, the search query including at least one query term (e.g., col. 8, ll. 62-66).

Selecting a set of documents from the Internet, assigning to each document in the set a generic score that characterizes the relevance of the document to the at least one query term (discussed above);

Retrieving the user's user profile and assigning to each of the set of documents a profile score based on the user profile (discussed above); and

Ranking the set of documents according to their generic and profile scores (discussed above).

Breese does not expressly teach the search query including the user's identification number.

However, Breese teaches that a user has a unique identification number for storing user attributes in a user database (col. 5, ll. 20-45), and that information regarding the user and the search to be performed is obtained at the input step 222 (col. 8, ll. 15-20, #224).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Breese with the above, such that the search query includes the user's identification number. The motivation would have been to adapt to specific user requirements in setting up the search engine.

As to claim 22, Breese as applied above further teaches wherein the documents visited by the user from which information is derived for use in a particular user's user profile is selected based on the user's activities when visiting the documents (e.g., col. 5, ll. 20-45).

Claims 28-29 and 44-45 are drawn to substantially the same subject matter as claims 2-3, discussed above.

9. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Breese et al (U.S. Patent 6,006,218) in view of Gerace (U.S. Patent 5,848,396).

As to claim 21, Breese teaches wherein the user profile includes demographic information provided by the user (fig. 5).

Breese does not expressly teach geographic information.

However, Gerace teaches a user profile including both demographic and geographic information (col. 5, l. 63 – col. 6, l. 15).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Breese with the above, such that geographic information is additionally stored with the user profile. The motivation would have been to store more information about the user to facilitate better decisions by the information retrieval system.

10. Claim 4-7, 9-17, 19-20, 23-24, 30-33, 35-42, 46-49, and 51-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Breese et al (U.S. Patent 6,006,218) in view of Konig et al (U.S. Patent 6,981,040).

As to claims 4-5 and 14, Breese does not expressly teach updating the user profile by updating a term-based profile by identifying a set of terms from a document in the set of documents, and adding information about the identified set of terms to the term-based profile; and updating a category-based profile by classifying the document into a plurality of categories, and adding information about the plurality of categories to the category-based profile; and updating a link-based profile by analyzing links in the document, and adding information derived from the analyzed links to the link-based profile.

However, Konig teaches updating a term-based, and category-based profile as claimed (col. fig. 4A, fig. 4C, col. 10, l. 51, col. 12, l. 55). Furthermore, Konig teaches analyzing links and locations in documents for updating a user model (user topic distribution, user site distribution, and see fig. 13, fig. 4, fig. 15A, col. 17, l. 47, col. 15, ll. 8-15, col. 18, ll. 17-25, col. 22, l. 64 – col. 23, l. 10).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Breese with the above, such that the claimed updating of the term-based, category-based, and link-based profiles is implemented with appropriate weights associated with each item (see e.g., fig. 4). The motivation would have been to represent user interest in a document or product independently of any specific user information need, as taught by Konig (col. 4, ll. 1-7). This would further enhance search results when combined with Breese.

As to claim 6, Konig as applied above further teaches wherein the link-based profile includes information about URLs or portions of URLs (fig. 4).

As to claim 7, Konig as applied above further teaches or suggests wherein the link-based profile comprises a plurality of URLs and a weight associated with each URL, wherein the weight is based on one or more factors selected from the group consisting of frequency with which the user visits the URL, time the user has spent viewing a document associated with the URL and quantity of the user's scrolling activity at the document; and a plurality of hosts and a weight associated with each host, wherein the weight is based on frequency of the user's visits to the host (col. 12, ll. 28-54, col. 23, ll. 1-10).

As to claim 9, Konig as applied above further teaches wherein a term in the term-based profile is an expression comprising at least one word and a weight (fig. 4A).

As to claim 10, Konig as applied above further teaches wherein the weight is a weight associated with occurrences of the term in the set of documents (fig. 4, col. 10, l. 52 – col. 12, l. 55).

As to claim 11, Konig as applied above further teaches wherein the weight of a term depends at least partially on the term's term frequency and inverse document frequency in said set of documents (col. 10, l. 52 – col. 11, l. 20).

As to claim 12, Konig as applied above further teaches wherein a category in the category-based profile characterizes at least one aspect of documents in the category and the category is associated with a weight indicative of the category's importance relative to other categories (fig. 4, 7, 8, col. 15, ll. 7-32).

As to claim 13, Konig as applied above further teaches wherein the at least one aspect of the documents in the category is selected from the group consisting of: document format, document type, document topic and document origin (e.g., col. 15, ll. 7-15 and see above).

As to claim 15, Breese discloses a user profile and a search engine (fig. 1), but does not expressly teach wherein the user profile is stored on a server of the search engine.

However, Konig teaches wherein the user profile is stored on a server of the search engine (fig. 1).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Breese with the above, such that the user profile is stored on a server of the search engine. The motivation would have been to adapt to the requirements of the user in setting up the search system, or to provide personalized services for simultaneous clients, as taught by Konig (col. 7, ll. 20-25).

As to claim 16, Breese and Konig both disclose a user profile and a client associated with the user (Breese and Konig, fig. 1), but do not expressly teach wherein the user profile is stored on the client.

However, it has been held that rearrangement of parts is obvious. *In re Japikse*, 181 F.2d 1019, 86 USPQ 70. It has also been held that making integral and/or separable is obvious. *In re Larson*, 340 F.2d 965, 968, 144 USPQ 347, 349 (CCPA 1965), *In re Dulberg*, 289 F.2d 522, 523, 129 USPQ 348, 349 (CCPA 1961). Furthermore, as taught by Konig, each user has his/her own user profile (Konig, col. 7, ll. 27-28).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Breese with the above, such that each user profile is stored on the user's (client) computer, and operation of Breese otherwise remains the same. The motivation would have been to adapt to the requirements of the user in setting up the search system. For example, one may desire to store personal user data on the client computer, rather than a public server.

As to claim 17, Breese does not expressly teach wherein the user is a group of users.

However, Konig teaches wherein the user is a group of users (col. 20, ll. 24-28, col. 9, ll. 47-52).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Breese with the above, such that the user is a group of users. The motivation would have been to represent the interest level of a group of users in a document independently of any specific information need, as taught by Konig (col. 9, ll. 47-52).

Claims 19-20 are drawn to substantially the same subject matter as claims 4-5, discussed above, in addition to creating, which must happen in Konig in order to store the relevant data (see e.g., fig. 4).

As to claim 23, the "storing" limitation is addressed with respect to claim 15 above. Breese, as applied above, further teaches the retrieving including the user's user profile based on an identification number associated with the user and the user's profile (col. 5, ll. 23-30). Note that Breese must retrieve the data in order to process it.

Claim 24 is drawn to substantially the same subject matter as claim 16, discussed above.

Claims 30-33, 35-42, 46-49, and 51-58 are drawn to substantially the same subject matter as claims 4-7 and 9-17 discussed above.

11. Claims 8, 34, and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Breese et al (U.S. Patent 6,006,218) in view of Konig et al (U.S. Patent 6,981,040) further in view of Gabriel et al (U.S. Patent 6,584,468).

As to claim 8, Breese and Konig do not expressly teach wherein the URLs further include URLs that have not been visited by the user, but are related to the URLs that have been visited by the user and the weight of an unvisited URL depends on its distance to at least one related URLs that have been visited.

However, Gabriel teaches wherein URLs include URLs that have not been visited by a user but are related to URLs visited by a user, and the weight of an unvisited URL depends on its distance to at least one related URLs that have been visited (col. 7, l. 37 – col. 9, l. 10).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Breese and Konig with the above teachings, such that the above claimed subject matter is implemented. The motivation would have been to facilitate indexing relevant information, as taught throughout Gabriel (e.g., Abstract, col. 7, ll. 37-40, col. 2, ll. 34-46).

Claims 34 and 50 are drawn to substantially the same subject matter as claim 8, discussed above.

12. Claims 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Breese et al (U.S. Patent 6,006,218) in view of Konig et al (U.S. Patent 6,981,040) further in view of Dumais et al (US 2004/0267700).

As to claims 25-26, Breese as applied above further teaches wherein the ranked set of documents comprises a personalized set of documents ordered by personalized scores generated by combining the document's generic and profile scores

(col. 7, ll. 33-36, fig. 2C). Furthermore, Breese teaches a set of documents ordered by their generic scores (see above).

Breese and Konig do not expressly teach the ranked set of documents comprising the above two sets of documents, and interleaving the two sets to form the ranked set of documents.

However, Dumais teaches interleaving results from a personal search engine and other search results for presenting to the user (para. 0029).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Breese and Konig with the above, such that the ranked set of documents comprises the above two sets of documents, and the two sets are interleaved to form the ranked set of documents. The motivation would have been to create a personal browsing system to be a portal to all of a user's content, including personal information as well as more general resources, as taught by Dumais (para. 0029).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles E. Lu whose telephone number is (571) 272-8594. The examiner can normally be reached on 8:30 - 5:00; M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Apu Mofiz can be reached at (571) 272-4080. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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